

Work Order ID 59874

June 21, 2010 10:38:03 AM



Item ID: D2600-1-190

Accept

Setup Start

Stop

Revision ID:

Item Name: Extrusion Round 3" 206

Start Date: 6/15/10 Start Qty: 42.00

Required Date: 6/21/10 Req'd Qty: 42.00

Cust Item ID:

Customer:

Reference:

Run Start

Stop

Approvals:

Process Plan: C2

Date: 10/6/21

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr

Revision Nbr

D2600

Rev D1

100



Purchasing

Purchasing

PURCHASING

Memo

Issue P/O: 12127 ☐ a) Extrude as per Dwg D2600 (190" long) ☐ b)Material: 6061-T6 ☐ c) Bon L die # 897121 ☐ d) Material certification is required.

0.00

0.00

110



Packaging

Packaging

Receive & Inspect for Damage & Mat'l Certs

Memo

Ensure material certification is attached

0.00

0.00

120



QC

Quality Control

QC6- Inspect dimensions to drawing

Memo

0.00

0.00

C2 10/6/21 42

10/6/21 48

10/6/21
48S1067/30
S1067/30



Work Order ID 59874

Tuesday, June 15, 2010 1:06:27 PM

Page 2

Item ID: D2600-1-190

Accept

Setup Start

Revision ID:

Stop

Item Name: Extrusion Round 3" 206

Start Date: 6/15/2010 Start Qty: 80.00

Cust Item ID:

Required Date: 6/21/2010 Req'd Qty: 80.00

Customer:

Reference:

Run Start

Approvals: Process Plan: _____

Date: _____

Tooling: _____

Date: _____

QC: _____

Date: _____

SPC (Y/N): _____

Date: _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours
130	Identify as per dwg & Stock Location: <i>HALL 803</i>	0.00
Packaging	Memo	0.00
Packaging		
140	QC21- Final Inspection - Work Order Release	0.00
QC	Memo	0.00
Quality Control		

Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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x 48

BE 10/08/03

10/08/04

mf 10-8-04

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

Tuesday, June 15, 2010 1:06:32 PM

Page 1

Work Order ID: 59874

Parent Item: D2600-1-190

Parent Item Name: Extrusion Round 3" 206



Start Date: 6/15/2010

Required Date: 6/21/2010

Start Qty: 80.00

Required Qty: 80.00

Comments: IPP Rev:A 99.08.18 Was 2600-1 added -240 for length EC
IPP Rev.B 07.02.28 Changed length to -190 LL

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D2600-1-190P		Purchased	No			110	Each	0.0000	1	80			
Extrusion Round 3" 206													



LC 12/7/25 48

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



DESIGN <i>[Signature]</i>	DRAWN BY <i>[Signature]</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>KE</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D2600	REV. 0 SHEET 1 OF 5
DATE 98.08.20		TITLE EXTRUSION	SCALE 1:1
A	97.01.21	NEW ISSUE	
B	97.09.09	CHANGE MATERIAL SPEC.	
C	98.04.16	ADD D2600-3, UPDATE D2600-1 WIDTH, ADD DIE NO.	
D	98.08.20	INCREASE MIN. UTS TO 40 KSI	
DI	01.04.17	ADD PART NUMBERS + DIE NUMBERS <i>4 CP</i>	

RELEASED
98.08.25 DS

GENERAL NOTES

1. MATERIAL: 6061-T6 (QQ-A-200/8)

MINIMUM YIELD TENSILE STRENGTH = 35 ksi
MINIMUM ULTIMATE TENSILE STRENGTH = 40 ksi
MINIMUM ELONGATION = 8 %

A SAMPLE FROM EACH BATCH WILL BE PULL TESTED TO ASTM STANDARD B221 BY AN APPROVED TESTING FACILITY TO ENSURE THAT THE BATCH MEETS THE ABOVE MINIMUM MECHANICAL PROPERTIES.

2. BREAK ALL SHARP CORNERS 0.010 MAX.

3. NO TOOLING MARKS.

4. TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED.

5. ALL DIMENSIONS ARE IN INCHES.

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. *59874*
BS-10-6-15

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

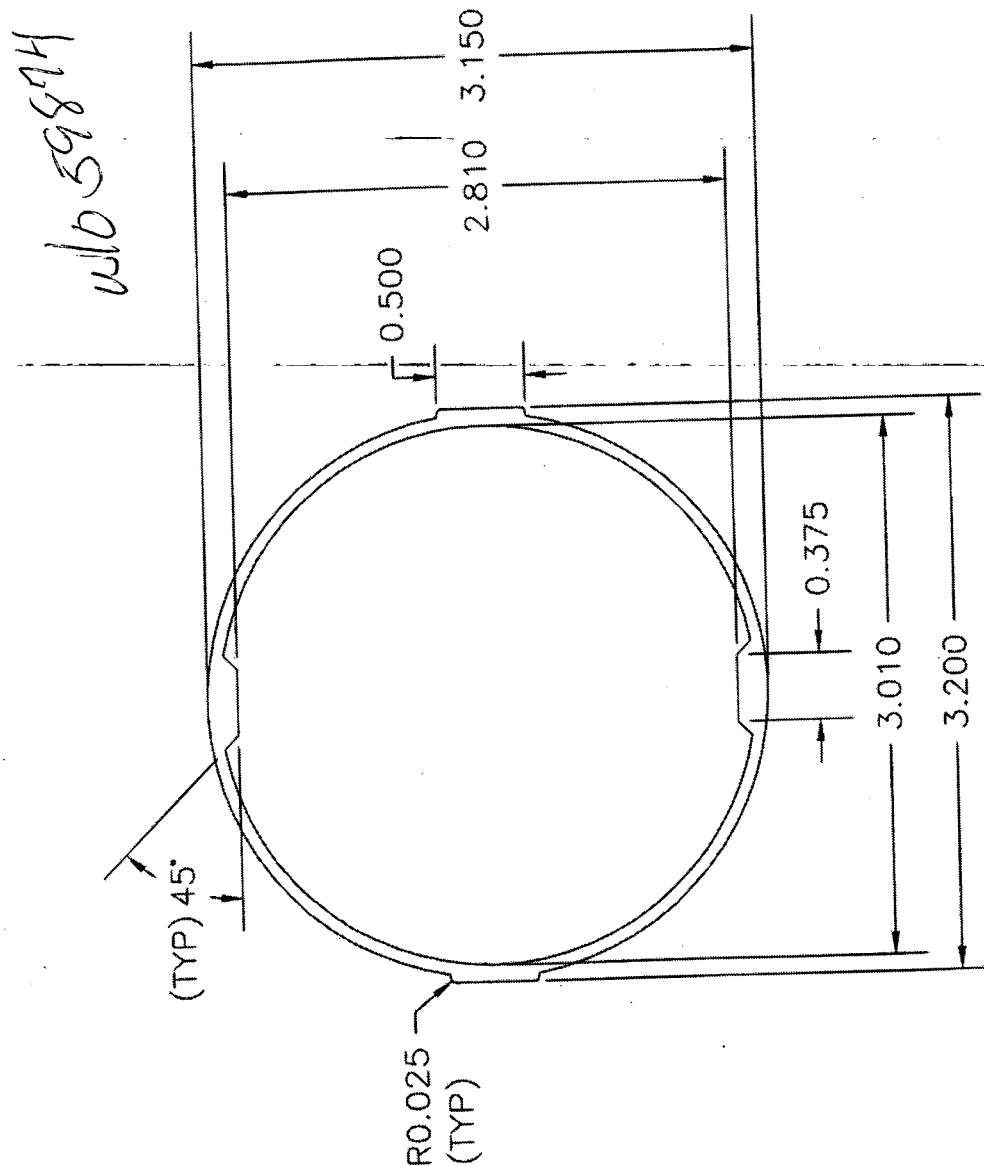
NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



DESIGN <i>[Signature]</i>	DRAWN BY <i>[Signature]</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D2600	REV. D SHEET 2 OF 5
DATE 98.08.20		TITLE EXTRUSION	SCALE 1:1

RELEASED
98.8.25 DS



D2600-1

MANUFACTURED WITH CARADON INDALEX DIE # MH-18870
OR BON L DIE # 897121 (PREFERRED CHOICE)
PART NUMBER IS D2600-1-XXX WHERE XXX IS CUT LENGTH IN INCHES (EG. D2600-1-160 IS 160" LONG)



W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

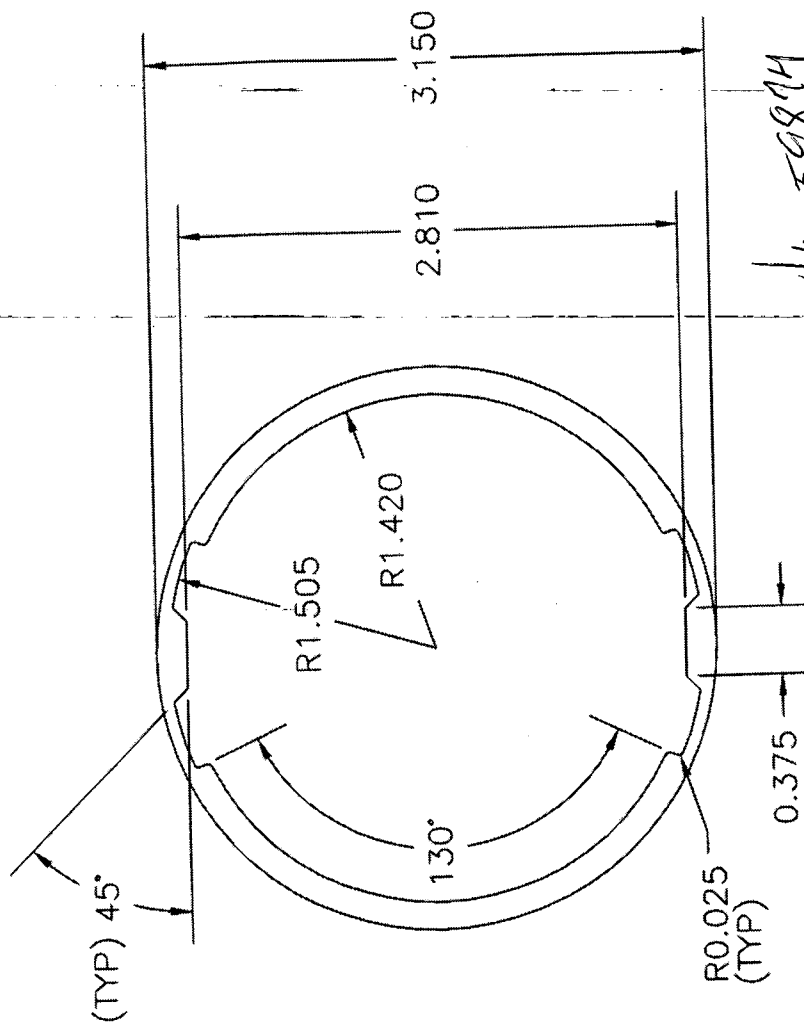
NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



DESIGN <i>DM</i>	DRAWN BY <i>DM</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>KE</i>	APPROVED <i>SA</i>	DRAWING NO. D2600	REV. D SHEET 3 OF 5
DATE 98.08.20		TITLE EXTRUSION	SCALE 1:1

RELEASED
98.8.25 DS



w/b 59814

D2600-3

MANUFACTURED WITH CARADON INDALEX DIE # MH-18859

OR BON L DIE # 897122 (PREFERRED CHOICE)

PART NUMBER IS D2600-3-XXX WHERE XXX IS CUT LENGTH IN INCHES (E.G. D2600-3-120 IS 120" LONG)



W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

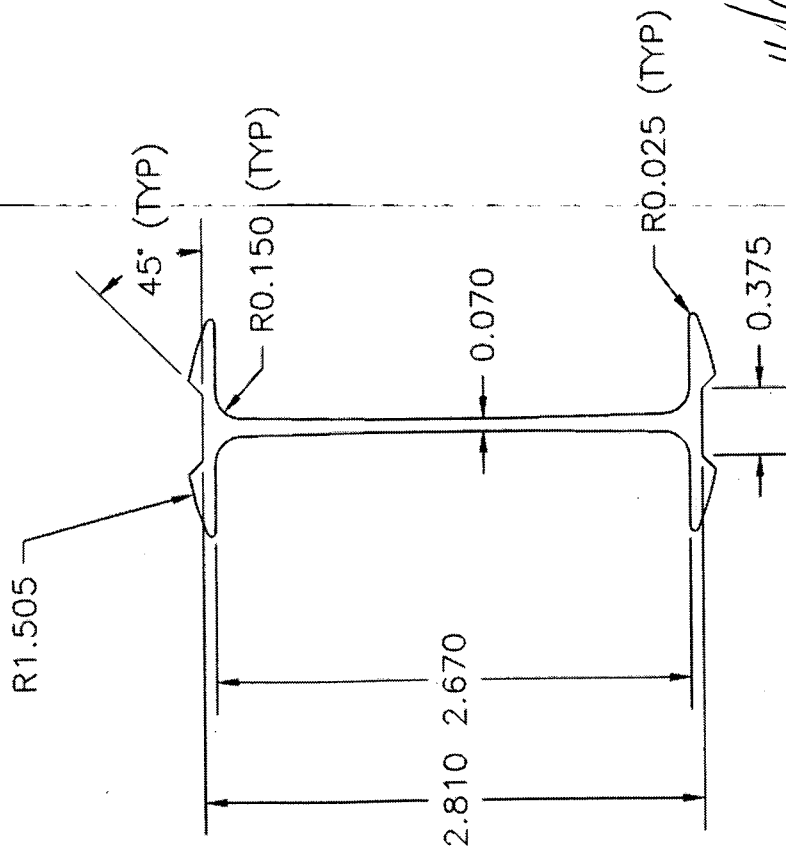
NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



DESIGN <i>ME</i>	DRAWN BY <i>ME</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>KE</i>	APPROVED <i>KE</i>	DRAWING NO. D2600	REV. D SHEET 4 OF 5
DATE 98.08.20		TITLE EXTRUSION	SCALE 1:1

RELEASED
98.8.25 DS



D2600-5

MANUFACTURED WITH CARADON INDALEX DIE # MS-18871

PART NUMBER IS D2600-5-XXX WHERE XXX IS CUT LENGTH IN INCHES
(EG. D2600-5-108 IS 108" LONG)



W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

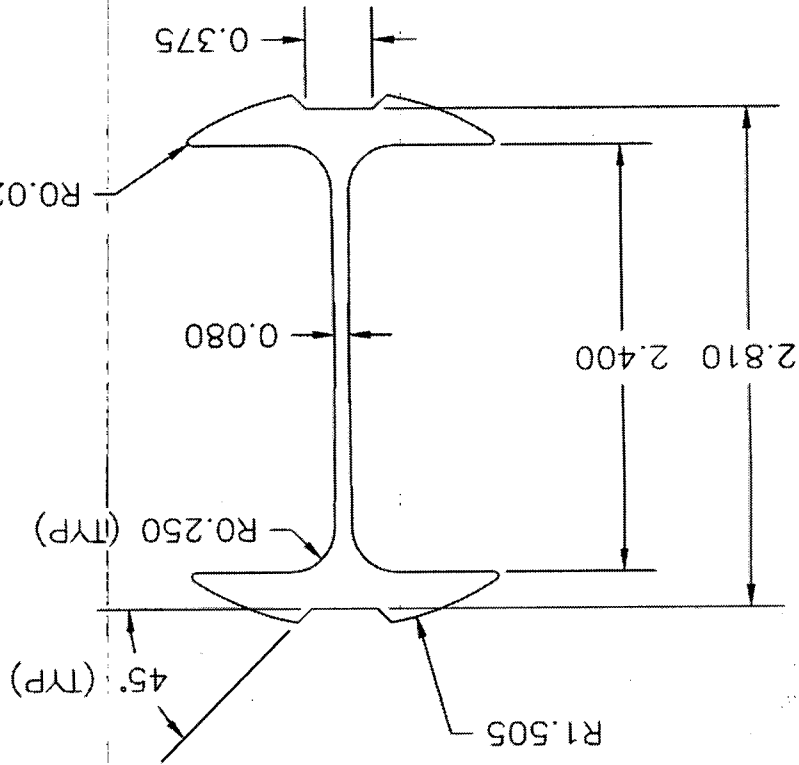
DART



DESIGN	DRAWN BY	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED	APPROVED	DRAWING NO.	REV. D
LE	[Signature]	D2600	SHEET 5 OF 5
DATE	TITLE		SCALE
98.08.20	EXTRUSION		1:1

RELEASED
R 98.8.25 DS

W6 59894



D2600-7
MANUFACTURED WITH CARADON INDALEX DIE # MS-18872
PART NUMBER IS D2600-7-XXX WHERE XXX IS CUT LENGTH IN INCHES
(EG. D2600-7-125 IS 125" LONG)



W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



ACCT# 00046024

INVOICING COMPANY AND LOCATION
SIGNATURE ALUMINUM CANADA
1850 CLEMENTS ROAD
PICKERING ON L1W 3R8

SHIPPING MANIFEST

MANIFEST DATE
07-28-10
MANIFEST NUMBER
682087
SALES ORDER NUMBER
64085REFER TO
THESE NUMBERS ON
ALL CORRESPONDENCE

TERMS / FREIGHT

O / P

CREDIT REP
DHILLON, ROBE

SALES REP

FIELD SALES REP
Bates M
905-427-2235CUST SERVICE REP
Burton D
905-427-2227BILL OF LADING NUMBER
08409451SHIP TO
DART AEROSPACE LTD.
1270 ABERDEEN ST.
HAWKESBURY ON
K6A 1K7 CNSOLD TO / PURCHASER
DART AEROSPACE LTD.
1270 ABERDEEN ST.
HAWKESBURY ON
K6A 1K7 CN

PHONE 613-632-5200

PHONE 613-632-5200

CUSTOMER ID
46024
ORDER DATE
06/21/10
CUSTOMER PO NUMBER
12127

JOB

CUSTOMER ID		ORDER DATE		QUANTITY		MFG. PART NUMBER		ALLOY & TEMPER		FINISH DESCRIPTION		THIS SHIPMENT			UNIT		QUANTITY DUE	
46024		06/21/10		12127														
ITEM NO.	ORIGINAL ORDER QUANTITY	UNIT	PREVIOUS SHIPPED QUANTITY	MFG. PART NUMBER		ALLOY & TEMPER		FINISH DESCRIPTION		NBR OF PKGS.	GROSS POUNDS	NET QUANTITY	UNIT	QUANTITY DUE				
				CUSTOMER PART NUMBER		LENGTH		FABRICATION DESCRIPTION										
						CUTTING TOLERANCE		SHIPPING TOLERANCE										
01	1105	LB	0	DAA-3-2	6061	/T6	MILL	1	456	439	LB	666						
	875	FT	0	D2962150	150"		CERTIFICATE OF COMP			350.00	FT	525						
	70	PC	0		+5/16 "		(+015-015,0080-0059)			(28)	PC	42						
				LOT/TKT DETAIL:				64085010 / 365118		1	456	439	28	PC				
02	666	LB	0	DAA-897121-3	6061	/T6	MILL	1	747	723	LB	0						
	665	FT	0	D2600-1-190	190"		CERTIFICATE OF COMP			759.99	FT	0						
	42	PC	0		+5/16 "		(+015-015,0048-0035)			(48)	PC	0						
				LOT/TKT DETAIL:				64085020 / 365106		1	747	723	48	PC				
03	467	LB	0	DAA-897121-1	6061	/T6	MILL	1	511	492	LB	0						
	467	FT	0	D2600-1-160	160"		CERTIFICATE OF COMP			519.99	FT	0						
	35	PC	0		+5/16 "		(+015-015,0040-0029)			(39)	PC	0						
				LOT/TKT DETAIL:				64085030 / 365107		1	511	492	39	PC				
										3	1714	1654	LB					

Transportation/Traffic damages and/or shortage claims are to be noted on the delivery copy of sellers shipping manifests and signed and dated below by customers authorized representatives.
No return materials will be accepted for credit without permission. The articles and/or services covered by this shipping manifest were produced in accordance with the fair labor standards act of 1938 as amended. Order accepted subject to the terms and conditions stated on the reverse side.

PAGE 1

DATE OF DELIVERY

DRIVER

CUSTOMER ACK: _____

MENT OF GOODS DELIVERED AND CONDITION

CERTIFICATE OF COMPLIANCE

SIGNATURE ALUMINUM CANADA

1850 CLEMENTS ROAD
PICKERING, ON L1W 3R8

Cert. Date		Cert. No.		Sales Order		Page	
07/28/10		208424		64085		1	
Cust. PO		B/L No.		Lot		Date	
2127		08409451		64085020		7/28/10	
Sold To				Ship To			
46024				46024			
DART AEROSPACE LTD. 1270 ABERDEEN ST. HAWKESBURY, ON K6A 1K7				DART AEROSPACE LTD. 1270 ABERDEEN ST. HAWKESBURY, ON K6A 1K7			
Item No	Part No	Item Description				Cust Part	
2.000	DAA-897121-3	190" Mill 6061 T6				D2600-1-190	
Gross Weight	747 LBS						
Net Qty	723 LB 48 PC 760 FT 1 PKG						
Specification						Die Desc	
AMS-QQ-A-200/8 & ASTM B221-08							

Mechanical Tests:							Bend/
Test No.	Tensile MPA / KSI	Yield MPA / KSI	%Elongation	Conductivity	Drift	HREW	
1	299.6 / 43.5	271.0 / 39.3	9.9	.0		91	
Chemical Analysis:							
SI	FE	CU	MN	MG	CR	ZN	TI

.63 .25 .28 .05 .88 .07 .11 .02

This will certify that the material described herein has been inspected and tested in accordance with Signature Aluminum Canada's standard sampling and testing procedures or in accordance with the requirements of any specification forming a part of the material description to the extent indicated herein. Data of chemical composition for the material and test results from samples representative of the material are set forth above hereof or in any attachments hereto. This information shows that the material meets the applicable requirements. Inspection and test records are maintained on file. This certificate shall be deemed apart of and subject to the terms and conditions of warranty set forth on the reverse side of our order acknowledgment form. No other warranties are applicable.

Ryan Petersen, QA Manager Signature Aluminum Canada Inc

8
10/19/30

